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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,779	09/06/2006	Tony Whittaker	WW/3-22357/A/PCT	4513
324	7590	08/11/2009		
JoAnn Villamizar Ciba Corporation/Patent Department 540 White Plains Road P.O. Box 2005 Tarrytown, NY 10591			EXAMINER HRUSKOCI, PETER A	
			ART UNIT	PAPER NUMBER
			1797	
			NOTIFICATION DATE	DELIVERY MODE
			08/11/2009 ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/591,779

Applicant(s)

WHITTAKER ET AL.

Examiner

/Peter A. Hruskoci/

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/072482 A2 Weir et al. in view of Stevenson 5,370,800. Weir et al disclose (see pages 2-6) disclose a process of dewatering an aqueous suspension substantially as claimed. It is submitted that the reverse phase polymer added in the process of Weir et al. would appear to invert in the suspension and release sufficient polymer to bring about flocculation, thickening, and cake formation as in the instant process, since the same polymers and amounts appear to be utilized to dewater the same types of aqueous suspensions. The claims differ from Weir et al. by reciting that the process includes producing a thickened suspension by the release of free water by free drainage or filtration, and subjecting the thickened suspension to mechanical dewatering to form a cake. Stevenson discloses (see col. 1 line 68 through col. 3 line 50) that it is known in the art to mix waste water or a suspension with a first flocculating polymer, remove water from floccules in a rotary thickener, mix a second flocculating polymer with the floccules, and dewater the floccules in a filter press to produce pressed cake solids. It would have been obvious to one skilled in the art to modify the process of Weir et al. by utilizing the recited thickening and mechanical dewatering in view of the teachings of Stevenson, to aid in dewatering the suspension and forming a cake. The specific weight percent and intrinsic viscosity of the polymer, would have been an obvious matter of process optimization to one skilled in the art,

depending on the specific suspension treated and results desired absent a sufficient showing of unexpected results.

Applicants allege that Weir et al. refers to higher cake solids as an indication or increased dewatering effect on page 2 but there is no other mention of producing a cake and certainly nothing in Weir et al to suggest that the process would have resulted in a cake. It is submitted that the sieves utilized in the Examples of Weir et al. would produce a filter cake and filtrate. It is further submitted that Stevenson as applied above, disclose that it is known in the art to dewater thickened floccules with a belt filter press to produce press cake solids. Furthermore, applicants have not presented sufficient factual evidence to support the above allegation.

Applicant argues that Weir et al. is silent on both the mixing step and the mechanical dewatering step recited in the instant claims. It is submitted that teachings of Stevenson as applied above, disclose that it is known in the art of liquid purification to utilize a rotary thickener for mixing a polymer with a suspension to thicken the suspension, and a belt press for mechanically dewatering the thickened suspension to form a cake as recited in the instant claims.

Applicants allege that it would not be evident to a person skilled in the art that the partial inversion of the reverse-phase polymer as in the instant method would achieve improved cake solids, by subjecting the thickened sludge to mixing prior to a mechanical dewatering stage. It is submitted that the rotary thickener utilized in Stevenson would appear to be capable of partially inverting the reverse-phase polymer of Weir et al. by mixing the polymer with the thickened sludge prior to a mechanical dewatering stage producing cake solids. Furthermore, applicants have not supplied sufficient factual evidence to support the above allegation.

Applicants allege that the example of the present application shows a significant improvement in cake solids, which could not be predicted from anything stated in Weir et al. It is noted that the increased dewatering effect disclosed on page 2 of Weir et al. appears to include a higher cake solids. The instant example has been carefully considered but fails to overcome the above rejection. It is submitted that the specific test conditions utilized to produce the results shown in the example are not commensurate with the scope of the instant claims. For example, the example included the use of a specific polymer, filtration cell, furrowing technique, and compression dewatering device, which are not recited in the instant claims.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Peter A. Hruskoci/ whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Peter A. Hruskoci/
Primary Examiner
Art Unit 1797

8/6/09